

III. SUMMARY OF CLAIMED SUBJECT MATTER

There is one independent claim present in the claims under appeal, which is claim 1. The present invention as claimed in independent claim 1 provides a method for screening an oligopeptide library for bioactive cytotoxic T lymphocyte (CTL) epitopes. The oligopeptide library contains a conserved structural motif corresponding to a structural motif characteristic of peptides that associate with the MHC-haplotype to which the cytotoxic T cells used in the screening assay are restricted. This structural motif is referred to in the art as an agretope and is the portion of the oligopeptide that interacts with the MHC molecule. This claim contains a means plus function step in step (ii). The means plus function step is an antigen presentation means characterized by an MHC-haplotype that corresponds to the haplotype to which the cytotoxic T cells used in the instant method are restricted.

In this method, (a) the cytotoxic T cells all share the same MHC-haplotype restriction ("a population of cytotoxic T cells having the same MHC-haplotype restriction"), (b) the released molecules or peptides all come from a library based upon the MHC-haplotype restriction of those cytotoxic T cells ("contains a structural motif corresponding to an agretope of the MHC-haplotype to which said cytotoxic T cells are restricted"), and (c) the antigen presentation means is also based upon the MHC-haplotype of the cytotoxic T cells ("which antigen presentation means correspond to the MHC-haplotype to which the cytotoxic T cells are restricted"). The correlated cytotoxic T cells, library of molecules and the antigen presentation means permits complete testing of a less complex library with the goal of finding a range of active molecules, including but not limited to the native sequence.

Support for claim 1 is found throughout the instant specification, and, particularly at page 11 at paragraph [0032] and at page 30 starting at paragraph [0087] through paragraph [0097] on page 36. The structure and materials that correspond to the antigen presentation means of step (ii) are found throughout the instant specification and particularly described at page 28 starting at paragraph [079] through paragraph [085] on page 30.